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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/052,688 03/31/98 CLEVINGER

L 98P7476US

EXAMINER

MMC2/1010

SIEMENS CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
186 WOOD AVENUE SOUTH  
ISELIN NJ 08830

PERALTA, R

ART UNIT

PAPER NUMBER

2814

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Advisory Action**

Application No.

09/052,688

Applicant(s)

CLEVENGER ET AL.

Examiner

Ginette Peralta

Art Unit

2814

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 September 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2.  The proposed amendment(s) will not be entered because:  
(a)  they raise new issues that would require further consideration and/or search (see NOTE below);  
(b)  they raise the issue of new matter (see Note below);  
(c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-5 and 7-15.Claim(s) withdrawn from consideration: 6,16-27.

8.  The proposed drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.  
9.  Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). \_\_\_\_\_.  
10.  Other: \_\_\_\_\_

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's argument that Sumi does not show lining the bottom surface and sidewalls, and that one cannot combine Sumi with McTeer without losing the exposed sidewalls of Sumi, has been considered and it is noted that the purpose of Sumi is to form a low resistance contact having excellent barrier properties and filling properties, the exposed sidewalls is not a major inventive feature, furthermore, contact plugs are well known in the art and to planarize and form a lining layer on top of the metallization as McTeer teaches would have been within the scope of anyone of ordinary skill in the art. Furthermore McTeer deposits a wetting layer of the same material as Sumi, titanium/ titanium nitride, that by being deposited amorphous as Sumi teaches, will inherently improve the electromigration properties of the contact.



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